plant cell's increased tolerance to an environmental stress as compared to a wild type variety of the plant cell, wherein the environmental stress is selected from one or more of the group consisting of drought and low temperature, and wherein the PKSRP is a *Physcomitrella patens* PKSRP.

33. (New) The transgenic plant cell of Claim 32, wherein the PKSRP is a MPK-3 protein as defined in SEQ ID NO:35.

34. (New) The transgenic plant cell of Claim 32, wherein the PKSRP coding nucleic acid comprises a polynucleotide as defined in SEQ ID NO:22.

35. (New) A transgenic plant cell transformed by a Protein Kinase Stress-Related Protein (PKSRP) coding nucleic acid, wherein the PKSRP coding nucleic acid hybridizes under stringent conditions to at least one sequence selected from the group consisting of the sequence of SEQ ID NO:22 and the full-length complement of the sequence of SEQ ID NO:22, and wherein the stringent conditions comprise at least one wash in a 0.2X sodium chloride/sodium citrate (SSC), 0.1% SDS solution at 50°C.

36. (New) The transgenic plant cell of Claim 35, wherein the stringent conditions comprise an initial hybridization in a 6X SSC solution at 45°C followed by at least one wash in a 0.2X SSC, 0.1% SDS solution at 50°C.

37. (New) A transgenic plant cell transformed by a PKSRP coding nucleic acid, wherein the PKSRP coding nucleic acid comprises a polynucleotide encoding a polypeptide having at least 80% sequence identity with a polypeptide as defined in SEQ ID NO:35.

38. (New) The transgenic plant cell of any of Claims 32, 33, 34, 35, or 37, wherein the plant is a monocot.

39. (New) The transgenic plant cell of any of Claims 32, 33, 34, 35, or 37, wherein the plant is a dicot.

40. (New) The transgenic plant cell of any of Claims 32, 33, 34, 35, or 37, wherein the plant is selected from the group consisting of maize, wheat, rye, oat, triticale, rice, barley, soybean, peanut, cotton, rapeseed, canola, manihot, pepper, sunflower, tagetes, solanaceous plants, potato, tobacco, eggplant, tomato, Vicia species, pea, alfalfa, coffee, cacao, tea, Salix species, oil palm, coconut, perennial grass, and a forage crop.

41. (New) A transgenic plant comprising a plant cell according to any of Claims 32, 33, 34, 35, or 37.

42. (New) A seed produced by a transgenic plant comprising a plant cell according to any of Claims 32, 33, 34, 35, or 37, wherein the seed comprises the PKSRP nucleic acid, wherein the seed is true breeding for an increased tolerance to an environmental stress as compared to a wild type variety of the plant cell, and wherein the environmental stress is selected from one or more of the group consisting of drought and low temperature.

43. (New) An isolated Protein Kinase Stress-Related Protein (PKSRP) coding nucleic acid, wherein the PKSRP coding nucleic acid comprises a polynucleotide that encodes a polypeptide as defined in SEQ ID NO:35.

44. (New) The isolated PKSRP coding nucleic acid of Claim 43, wherein the PKSRP coding nucleic acid comprises a polynucleotide as defined in SEQ ID NO:22.

45. (New) An isolated PKSRP coding nucleic acid, wherein the PKSRP coding nucleic acid hybridizes under stringent conditions to at least one sequence selected from the group consisting of the sequence of SEQ ID NO:22 and the full-length complement of the sequence of SEQ ID NO:22, and wherein the stringent conditions comprise at least one wash in a 0.2X sodium chloride/sodium citrate (SSC), 0.1% SDS solution at 50°C.

46. (New) The PKSRP coding nucleic acid of Claim 45, wherein the stringent conditions comprise an initial hybridization in a 6X SSC solution at 45°C followed by at least one wash in a 0.2X SSC, 0.1% SDS solution at 50°C.

47. (New) An isolated PKSRP coding nucleic acid, wherein the PKSRP coding nucleic acid comprises a polynucleotide encoding a polypeptide having at least 80% sequence identity with a polypeptide as defined in SEQ ID NO:35.

48. (New) An isolated recombinant expression vector comprising an PKSRP coding nucleic acid of Claims 43, 44, 45, or 47, wherein expression of the PKSRP in a plant cell results in the plant cell's increased tolerance to an environmental stress as compared to a wild type variety of the plant cell, and wherein the environmental stress is selected from one or more of the group consisting of drought and low temperature.

49. (New) A method of producing a transgenic plant containing a Protein Kinase Stress-Related Protein (PKSRP) coding nucleic acid, wherein expression of the PKSRP in the plant results in the plant's increased tolerance to an environmental stress as compared to a wild type variety of the plant, comprising,

a. transforming a plant cell with an expression vector comprising the nucleic acid; and

b. generating from the plant cell a transgenic plant with an increased tolerance to an environmental stress as compared to a wild type variety of the plant,

wherein the PKSRP is a *Physcomitrella patens* PKSRP, and wherein the environmental stress is selected from one or more of the group consisting of drought and low temperature.

50. (New) The method of Claim 49, wherein the PKSRP is a MPK-3 polypeptide as defined in SEQ ID NO:35.

51. (New) The method of Claim 49, wherein the PKSRP coding nucleic acid comprises a polynucleotide as defined in SEQ ID NO:22.

52. (New) A method of producing a transgenic plant containing a Protein Kinase Stress-Related Protein (PKSRP) coding nucleic acid, wherein expression of the PKSRP in the plant results in the plant's increased tolerance to an environmental stress as compared to a wild type variety of the plant, comprising,

a. transforming a plant cell with an expression vector comprising the nucleic acid; and

b. generating from the plant cell a transgenic plant with an increased tolerance to an environmental stress as compared to a wild type variety of the plant,

wherein the PKSRP coding nucleic acid hybridizes under stringent conditions to at least one sequence selected from the group consisting of the sequence of SEQ ID NO:22 and the full-length complement of the sequence of SEQ ID NO:22, wherein the stringent conditions comprise at least one wash in a 0.2X sodium chloride/sodium citrate (SSC), 0.1% SDS solution at 50°C, and wherein the environmental stress is selected from one or more of the group consisting of drought and low temperature.

53. (New) The method of Claim 52, wherein the stringent conditions comprise an initial hybridization in a 6X SSC solution at 45°C followed by at least one wash in a 0.2X SSC, 0.1% SDS solution at 50°C.

54. (New) A method of producing a transgenic plant containing a Protein Kinase Stress-Related Protein (PKSRP) coding nucleic acid, wherein expression of the PKSRP in the plant results in the plant's increased tolerance to an environmental stress as compared to a wild type variety of the plant, comprising,

a. transforming a plant cell with an expression vector comprising the nucleic acid; and

b. generating from the plant cell a transgenic plant with an increased tolerance to an environmental stress as compared to a wild type variety of the plant,

wherein the PKSRP coding nucleic acid comprises a polynucleotide encoding a polypeptide having at least 80% sequence identity with a polypeptide as defined in SEQ ID NO:35, and wherein the environmental stress is selected from one or more of the group consisting of drought and low temperature.

REMARKS

In addition to the above requested amendments, Applicants submit the remarks below. Applicants respectfully request reconsideration and allowance of the remaining claims in light of these amendments and remarks. Applicants also would like to thank Examiner Collins and Primary Examiner Bui for taking time to discuss this case in a personal interview on January 7, 2003.

Applicants have cancelled Claims 11-13 and 21-31 as relating to non-elected subject matter. Applicants also have cancelled Claims 1-10 and 14-20, and have added new